IN THE CLAIMS

Please cancel claims 1-23 without prejudice.

Please add claims 24-46 as follows:

~~Patent Claims~~WHAT IS CLAIMED IS:

1-23. (Cancelled)

24. An analog-to-digital converter for converting a signal to be digitized into a digitized signal, comprising:

a plurality of comparators, each of which has a first and a second input and an output, wherein the output can be used to provide the digitized signal; and

an impedance network for each comparator, wherein each impedance network is connected between at least one input on the associated comparator and the signal to be digitized and wherein each impedance network is connected between the associated comparator and a first electrical reference potential;

wherein the impedance networks are configured such that the comparators are brought essentially to the same operating point.

25. The analog-to-digital converter of claim 24, wherein the second input of at least some of the comparators is brought to a second electrical reference potential.

26. The analog-to-digital converter of claim 25, wherein the second electrical reference potential is the ground potential.

27. The analog-to-digital converter of claim 26, wherein at least some of the impedance networks have a first nonreactive resistor and a second nonreactive resistor, the first

nonreactive resistor being connected between the first input of at least some of the comparators and the first electrical reference potential, and the second nonreactive resistor being connected between the first input of at least some of the comparators and the signal to be digitized.

28. The analog-to-digital converter of claim 27, wherein at least some of the impedance networks have a voltage divider.

29. The analog-to-digital converter of claim 28, wherein the voltage divider has a first impedance which is connected between the first input and a third electrical reference potential.

30. The analog-to-digital converter of claim 28, wherein the voltage divider has a second impedance which is connected between the first input and the first electrical reference potential.

31. The analog-to-digital converter of claim 29, wherein the first impedance is a third nonreactive resistor and the second impedance is a fourth nonreactive resistor and wherein the first impedance is a first capacitance and the second impedance is a second capacitance.

32. The analog-to-digital converter of claim 31, wherein the third electrical reference potential is the electrical ground potential.

33. The analog-to-digital converter of claim 29, wherein the first electrical reference potential is split into a first potential part and into a second potential part, with a first portion of the comparators having at least some of their impedance network connected between the first input and the first potential part, and with a second portion of the comparators having at least some of their impedance network connected between the first input and the second

potential part.

34. The analog-to-digital converter of claim 33, wherein the second and the third electrical reference potential has a value between the first and the second potential part.

35. The analog-to-digital converter of claim 29, wherein at least some of the comparators have a calibration device configured such that it can be used to correct a parameter fluctuation between different comparators.

36. The analog-to-digital converter of claim 35, wherein the calibration device has a switching element between the first input and the impedance network, such that the switching element can couple the first input to the impedance network in a detection mode and bring the first input to a fourth electrical reference potential in a calibration mode, a resultant signal at the output of the comparator being able to be taken as a basis for calibrating the comparator using the calibration device.

37. The analog-to-digital converter of claim 36, wherein the fourth electrical reference potential is the same as the second electrical reference potential.

38. The analog-to-digital converter of claim 37, wherein the value of at least one of the first to fourth nonreactive resistors is calculated, for at least some of the impedance networks, on the basis of the criterion that one of the first inputs of the comparators has a signal applied to it which is essentially the same as the second electrical reference potential.

39. The analog-to-digital converter of claim 38, wherein the value of at least one of the first to fourth nonreactive resistors is calculated, for at least some of the impedance networks, on the basis of the criterion that altering the signal to be digitized by a prescribable value results, for at least some of the comparators, in an alteration to the electrical potential at their

first input by an essentially equal value.

40. The analog-to-digital converter of claim 39, wherein the value of at least one of the first to fourth nonreactive resistors is calculated, for at least some of the impedance networks, on the basis of the criterion that the nonreactive output resistance of at least some of the impedance networks is essentially the same.

41. An analog-to-digital converter for converting a signal to be digitized into a digitized signal, comprising:

a plurality of comparators, each of which has a first and a second input and an output, wherein the output can be used to provide the digitized signal; and

an impedance network for each comparator, wherein each impedance network is connected between at least one input on the associated comparator and the signal to be digitized and wherein each impedance network is connected between the associated comparator and a first electrical reference potential;

wherein the impedance networks are configured such that the comparators are brought essentially to the same operating point, and wherein at least some of the comparators have the respective associated impedance network containing a first impedance device part coupled to the first input and a second impedance device part coupled to the second input, wherein the signal to be digitized is split into a first and a second signal part to be digitized and the first electrical reference potential is split into a first potential part and a second potential part, and wherein the first impedance device part is connected between the first input, the first signal part to be digitized and the first potential part, and the second impedance device part is connected between the second input, the second signal part to be digitized and the second potential part.

42. The analog-to-digital converter of claim 41, wherein the first and second signal parts to be digitized are differential signals.

43. The analog-to-digital converter of claim 42, wherein the first impedance device parts have a first nonreactive resistor and a second nonreactive resistor, the first nonreactive resistor being connected between the first input and the first electrical potential part, and the second nonreactive resistor being connected between the first input and the first signal part to be digitized, and wherein the second impedance device parts have a third nonreactive resistor and a fourth nonreactive resistor, the third nonreactive resistor being connected between the second input and the second electrical potential part, and the fourth nonreactive resistor being connected between the second input and the second signal part to be digitized.

44. The analog-to-digital converter of claim 43, wherein at least one fifth nonreactive resistor is connected between the first and second inputs.

45. The analog-to-digital converter of claim 44, wherein the fifth nonreactive resistor is split into a first and into a second resistor part, with a connection between the first and second resistor parts being brought to a fifth electrical reference potential.

46. An integrated circuit including an analog-to-digital converter comprising:

plurality of comparators each having a first and a second input and an output, wherein the output is configured to produce a digitized signal; and

means coupled to each comparator between at least one input of the associated comparator and a signal to be digitized and between the associated comparator and a first electrical reference potential for bringing the comparators to essentially the same operating point.